# **ECOLE NAVALE**

# **EDUCATION DEPARTMENT**

# FIRST SEMESTER

# TRAINING OF THE EXECUTIVE OF THE NATION BASIC TRAINING FOR THE OFFICER TRADE



# HISTORICAL REVIEW OF THE DOCUMENT

<b>Edition</b>	Date	References	Evolutions	Performed by
1	01/10/05		First edition	

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# INTRODUCTION

The first semester begins with the arrival of the new cadets at the École navale and comes to an end mid February.

The training objectives of this semester which is dedicated to maritime and military basic training are as follows:

- to be integrated into the Navy;
- to assert the officer vocation:
- to place oneself within the Navy;
- to acquire the qualification of "officer of the watch" (in accordance with STCW) at an operational level;
- to get the qualification of mechanic of a «canot major»;
- to assess the level of English;
- to harden oneself physically.

A standard week is made of 35 teaching units of 50 minutes. During the first semester, a week is composed on average of 28 supervised teaching units. Moreover, those are completed by sport sessions by squad or option which represent 6 teaching units during working hours, 3 teaching units in non-working hours and one dedicated to activities save for supervised exercises.

Tests for assessing physical aptitudes of the cadets are also planned in the prospect of getting the military parachute licence (planned for the  $2^{nd}$  semester). This training course is only performed by volunteers.

Two teaching units will be dedicated to the assessment of the year's scientific level so as to form groups of cadets having an equivalent level . Those will be necessary for some courses of the  $2^{nd}$  semester.

The general course of the semester and the detailed training are described in the appendices.

# TRAINING PROGRAMME OF THE SEMESTER

	Subjects	НО	HNO	Coeff.	ECTS
FMI <sup>1</sup>	Level testing	2			/
	Boarding in the forces	70	32		
	Vessel training	36		4	
	Description   Description	4			
	Navigation	2 70 32 36 4 20 4 42 11 14 3 14 1 70 6 70 48 4 70 12 8 8 3 3 30 3 3 7 1 14 15 15 15 15 15 15 15 15 15 15 15 15 15	12		
FMM <sup>2</sup>	Manoeuvre	42		11	,
FIVIIVI	Operations / transmission	14		3	/
	Meteorology	14		1	
	Pre-corvette	70	6		
	Corvette		48	4	
	Canot major skipper qualification		4		
	Inaugural conferences	5			/
	Conferences of general interest	4	32 4 11 11 3 16 48 48 4 4 4 5 3 0 1 5 2 7 22 1 24		
	Ethics	12			,
	Ethics (LVE <sup>4</sup> )	2       36     4       20     4       52     12       42     11       42     11       42     11       70     6       70     48       4     4       4     12       8     3       30     3       4     0     1       12     3       8     3       30     3       4     0     1       10ce     3       5     5       4     0     1       10ce     3       2     2       3     7       23     22     1       24     24       24     24       24     24       25     35	/		
		3			
	History	30		3	5
Ethics (LVE <sup>4</sup> )  Interviews (LVE)  History  ORM  Official correspondence  5  CML English  8  8  8  8  8  8  8  8  8  8  8  8  7  8  8	4	0	1		
	Official correspondence	3			
FHM <sup>3</sup>	CML English	5			
	Infantry marches		5		
		20		3	
			2		/
	Soldier school	3	7		
	Sport by squad	23	22	1	
	Sport by option	24	24		
		4			
		5		3 1 3 1 3 1	
	•	7			
Divers	Integration period	140	42		/
		5			
	Suppleness	35			
_	TOTAL	727	192	47	5

<sup>&</sup>lt;sup>1</sup> FMI = Engineering training <sup>2</sup> FMM = Seaman training

<sup>&</sup>lt;sup>3</sup> FHM = Human and military training

<sup>&</sup>lt;sup>4</sup> LVE = Lieutenant responsible for a squad

<sup>&</sup>lt;sup>5</sup> TAP = Airborne troops

# TITLE I - DISCOVERY OF THE NAVY

#### 1. INTEGRATION PERIOD

This period is defined by an order of circumstances from the chief of the staff. It begins with the arrival of the cadets at the academy and is 4 weeks long.

It is composed of different activities among which:

- delivery of the uniforms;
- sport, sailing;
- medical aptitude examination;
- visit of units that are part of the French Navy;
- 2- day outing at sea (accustoming corvette);
- traditions learning.

# 2. APPRENTICESHIP TRAINING PERIOD

The objective of this 2-week long training period is to enable the future officer to place himself within the Navy and bring him a better knowledge of the maritime world in general. He discovers the life of his future subordinates by sleeping in the same place than the sailors or mariner officers and by eating with the crew members.

Each cadet has a "training passport". Relying on the decree  $140^{(6)}$ , he discovers the organisation of a unit, the different kinds of works, the personnel categories and their specialities, the role of the representatives in each category, the organisation of the navy, the organic and operational commanding units and their responsibilities, the support organisations...

<sup>&</sup>lt;sup>6</sup> Decree which governs the units' organisation within the French Navy

# TITLE II - SEAMAN TRAINING

#### 1. OBJECTIVES

This training aims at delivering a course on watch-keeping which meets a twofold requirement:

- First, the one linked with the specific needs of the French Navy, which means to grasp the specific features of warships environment.
- Then, the one which consists in being in accordance with the STCW 95 Convention (Standard Training and Certification for Watch-keeping);

## It implies two aspects:

- the nautical training, whose objective is to train officers that are able to take on their responsibilities as an officer of the watch immediately as far as coastal navigation is concerned; this training is made up of 2 main parts:
  - one covers the specific needs of the Navy (ATP1 volume II, operational culture and classical transmissions);
  - one dedicated to « STCW » which covers most of the STCW 95 code requirements (apart from ECDIS<sup>7</sup> and academic English) i.e. maritime English, navigation, manoeuvre, helm rules, simulator, meteorology, machines;
- the ship and engineering training (*FNE* in French) whose objective is to grasp complex mechanical systems through the study of different propulsion and production modes as well as the distribution of electrical energy on board Navy's ships. It must also enable to understand the different aspects linked with electrical energy.

#### 2. DETAILED TRAINING

The training is detailed in the appendices. Stages correspond to periods occurring either before or after the corvette (i.e. : stage 1 before the corvette sèche<sup>8</sup>, stage 2 between theoretical corvette and CF1, stage 3 after CF1).

Elements that are in bold type correspond to courses delivered during the pre-corvettes.

<sup>&</sup>lt;sup>7</sup> ECDIS : Electronic Chart Display & Information System

<sup>&</sup>lt;sup>8</sup> Corvette sèche: theoretical corvette for preparing cadets to corvettes at sea

# MARITIME ENGLISH.

Training title			UV Seaman training for cadets from the Academy (Semester 1)					
Short title			FMM S1					
Version			01 Edition date 1 <sup>st</sup> June 2003					
FCF	Peda.		Pedagogical objectives					
Landmark	obj. N		(to be able, at the end of the training, to)					

# A. STCW ENGLISH MODULE

Δ	1	To understand and use the IMO <sup>9</sup> standardised vocabulary dedicated to maritime
Λ	1	navigation in the field of maritime communications

Code: ANGMAR	Title	UI	Group	Stage	Room	Constraint		
1C	Introduction to maritime English	1						
2C	Basic vocabulary	1						
3C	Position / Route / Speed	1		1				
4C	VHF conversation	2		1				
5T	TD N° 1: Application of acquired knowledge	1						
6C	Meteorology	2				The logical sequence of the courses must be respected. It is better for cadets		
7C	Navigation alerts	1	squad	1 ou 2	Language room			
8C	Sea rescue	1	a sq					
9T	TD N° 2: Application of acquired knowledge	1	Half a					
10C	Organisation of the traffic, charts	1		2 ou 3		to attend a large number of navigation		
11C	Steering commands/Engine commands	1				courses before.		
12C	Mooring – Tides	1						
13C	Drawing alongside	1						
14C	Piloting	2						
15T	TD N° 3: Application of acquired knowledge	1		3				
16D	Oral comprehension test	1	Class		Lecture			
17D	Written test	1	Class		hall			
_	TOTAL	20		- <del></del>				

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 $<sup>^{9}</sup>$  International Maritime Organisation.

# **NAVIGATION**

, .	Fraining titl	e	UV S	UV Seaman training for cadets from the Academy (Semester 1)				
	Short title		FMM S1	FMM S1				
Version		01		Edition date	1 <sup>st</sup> June 2003			
FCF	Peda.		Pedagogical objectives					
Landmark	obj. N		(to be able, at the end of the training, to)					

# **B. MODULE NAVIGATION STCW**

	T	B. MODULE NAVIGATION STCW
В	1	To plan and carry out a crossing and set up the ship position
		Navigation by sight and coastal navigation
		Aptitude for setting up the ship position by using:
В	1.1	1 seamarks
В	1.1	2 navigational aids, including lighthouses, beacons and buoys
		3 navigation by dead reckoning, considering winds, tides, currents and planned
		speed
		Thorough knowledge and aptitude for using nautical charts and publications, such as nautical instructions, tide tables, notices for navigators, radio warnings for
В	1.2	navigation and information related to the maritime traffic organisation
	1.2	With the exception of the SEVCM (ECDIS): System for displaying electronic
		charts and information
D	1.2	Electronic systems for determining positions and for navigation
В	1.3	Aptitude for setting up the ship position by using electronic aids for navigation
		Echo-depth sounders
В	1.4	Aptitude for using these kinds of apparatuses and for accurately understanding the
		given information
		Magnetic compasses and gyro-compasses
В	1.5	Knowledge of main principles for using magnetic compasses and gyro-compasses
		Aptitude for determining errors on such apparatuses through celestial observations and by sight of land, and also for being able to take into account these errors
	_	
В	2	To use radar and ARPA to ensure navigation security
		Radar navigation
В	2.1	Knowledge of main principles for using radar and automatic radar plotting aid
		(ARPA)
В	2.2	Aptitude for making them function, for interpreting and analysing data given by the radar
		Main types of ARPA, characteristics, functioning standards and possible dangers
В	2.3	when man trusts to much in ARPA
D	2.4	Aptitude for making ARPA function, for interpreting and analysing data given by
В	2.4	them
		To send and receive information through visual signalling
В	3	Aptitude for transmitting and receiving signals through Morse luminous signalling
		Aptitude for using International signal code

NAVIGATION BY SIGHT								
Code: NAVCOT	Title	UI	Group	Teacher	Stage	Room	Obs	
1C	Sphere, chart	1		LV				
2C	Compass, logs	1		LV				
3P	Chart	1		Inst				
4P	Cras navigation plotter	1	Š	Illst				
5C	Position by sight	1	Squad	LV		P NAV		
6P	Headings, declination, deviation, variation	2			1			
7P	Position by sight: accuracy, precision, choice	3		Inst				
8P	Successive bearings – danger bearings	1						
8D	Test: coastal navigation	2	Year	LV Inst		Lecture hall		
9P	Marking of the test on coastal navigation	1	Squad	Inst		P NAV		
10P	Graphic dead reckoning	2		Inst	Pre-C1			
	TOTAL	16*						

<sup>\*</sup> including 2 UI in pre-corvette

	TIDE CURRENT								
Code: MARCOU	Title	UI	Group	Teacher	Stage	Room	Obs		
1C	Tides, theory	2		LV					
2P	Tides, reckoning for standard port	2							
3P	Tides, reckoning for secondary ports	2	S	Inst					
4P	Admiralty tide tables (ATT) – Standard and secondary ports	2	Squad	Inst		P NAV	After		
5C	Currents	1		LV	1		NAVCOT7		
6P	Current estimations	2		Inst					
7D	Test: tides - currents - coastal navigation	2	Class	LV Inst		Lecture hall			
8P	Test marking: tides-currents-coastal navigation	1	Squad	Inst		P NAV			
	TOTAL	14							

C 1			RADAR								
Code: RADARPA	Title	UI	Group	Teacher	Stage	Room	Obs				
1C	Navigation radar principle	2	Squad	LV DET	1	P NAV					
2S	Radar presentation – radar position	3					After NAVCOT7				
38	Fairway navigation – parallel datums – mooring – drift	3	½ Squad		Pre C1	Simrad					
<b>4S</b>	Real elements	3	72 Squaa	Inst	Pre C2						
58	Closest point of approach (CPA) – anti- collision manoeuvres	3									
6D	Test: detection	1	Class		3	Lecture hall					
	TOTAL	15*									

	VISUAL SIGNALS									
Code: SCOTT	Title	UI	Group	Stage	Room	Obs				
1P	International signal book	2		1						
2P	Scott	2	Squad	2	P NAV	By courses of one				
3P	Scott	2		2		teaching unit				
	TOTAL	6								

	NAUTICAL IN	FORM	ATION				
Code: DOCNAUT	Title	UI	Group	Teacher	Stage	Room	Obs
1P	DG NAUT (General instructions for nautical steering) presentation	1	Squad	LV NAV	1	P.NAV	
2P	Documents, charts - Preparation of the watch	2				PRE-C	
3P	SHOMAR (software for tides reckoning), NAV05 (software for navigation), crossing card				1.1.1.1.1	PRE-C	
4P	Deck logs and quartermaster's notebooks	1		Inst NAV		PRE-C	_
5P	Nautical information	1				PRE-C	
6P	Timepiece, time zones, date changing	2	Squad		2	PNAV	
7P	Sunrise and sunset by means of nautical almanacs	1	Squad		2	P.NAV	
	TOTAL	9*			·		·

<sup>\*</sup> including 5 teaching units in pre-corvette

	NAVIGATIO	N OUT	OF SIGH	HT			
Code: NAVHAUT	Title	UI	Group	Teacher	Stage	Room	Obs
1P	Navigation by sounding	1	Squad	Instructor		P NAV	
2C	Dead reckoning	1	Squad			P NAV	
3C	Geodesy, cartography, navigation by high latitudes	1	Squad	LV	2	P NAV	
4C	Electronic navigation: GPS – others	2	Squad			P NAV	
5P	Electronic navigation: TP FX 412	2		Instructor	Pre- C2	PRE-C	
6P	Dead reckoning: T900 and Calculator	2		Instructor	Pre- C2	PRE-C	
7C	Spherical trigonometry. Orthodromy	1	Squad	LV		P NAV	
8P	Practical orthodromy	2	Squad	Instructor		P NAV	
9D	Dead reckoning control radionavigation orthodromy. coastal navigation	2	Class	LV	3	Lecture hall	
10P	Dead reckoning control radionavigation orthodromy	1	Squad	Instructor		P NAV	
	TOTAL	15*				•	•
* including	•	15*			<u> </u>		

#### **MANŒUVRE**

Training title  UV Seaman training for cadets from the Academy (Semester 1)					m the Academy		
	Short title		FMM S1				
Ve	ersion		01 Edition date 1 <sup>st</sup> June 2003				
FCF	Peda.		Pedagogical objectives				
Landmark	obj. N		(to be able, at the end of the training, to)				

#### C. STCW MANŒUVRE MODULE

С	1	Answer a distress signal at sea
		Search and rescue at sea
		Knowledge of the content of the Manual for search and rescue at sea intended for
		merchant ships and issuing from the OMI
С	2	Ship manoeuvring
		Knowledge of the following issues:
		1 effects of deadweight capacity, draught, trim, speed and water depth under the keel on running circles and stopping distances
		2 effects of winds and currents on ship manoeuvring
		3 manoeuvres and procedures for the retrieval of a man-overboard
		4 squatting effect, flats off bottoms and similar effects
		5 correct procedures for anchoring and mooring

#### D. MODULE ON STCW NAVIGATION RULES

D	1	To perform bridge watch-keeping in complete safety
D	1.1	Extensive knowledge of the content, the application and subject of the International ruling statement for the prevention of collisions at sea
D	1.2	Extensive knowledge of fundamental principles that have to be observed during bridge watch-keeping
D	1.3	Extensive knowledge of working methods that assure the efficiency of the bridge team
D	1.4	Use of systems dedicated to traffic organisation in accordance with general measures related to the organisation of the maritime traffic

# 1. SAILING ACTIVITY

The objective is to make cadets acquire the sea sense certificate at the end of the first year. To this aim, 12 teaching units of sailing courses are planned during the first semester. Cadets who do not gain this certificate during this period will have to practise sailing in non working hours.

## 2. ASSESSMENT – MARKING

Cadets have to obtain a minimum mark of 16 out of 20 for the first test (COLREG). Additional tests will be organised in non-working hours until they all get this level that is necessary to obtain "sea chart" by equivalence.

Manoeuvres on the stretch of water are assessed through a continuous testing thanks to an individual report book, which can be consulted at any time.

Concerning sailing, the mark is awarded at the end of the training. It depends on the obtaining of cruiser skipper qualification or the number of sailing sessions which were performed by cadets who are held in check.

	THEORETIC	AL	MANŒU	VRE			
Code: MANTHEO	Title	UI	Group	Teacher	Stage	Room	Obs
/	Sailing at the École navale	1	Class	LV Man	1	Lecture hall	Beginning of the semester
1C	COLREG (collision regulations):  Buoyage – Day beacons and lights –  Collision and routes regulations – Sound signals - Information and communication signals - Application of COLREG to MN (DMM, DMU, DLM)	3		Inst Navis	1		By course of 1 UI
2C	Regulation steering and engine commands	1	CI		1	Lecture	
3D	Test dealing with MANTHEO 1C 1		Class		1	hall	
4C	Wind, sea, balance positions	2		LV	1		
5C	Steering damage 1 Manoeuvre or assistant		1				
6C	Hawsers, fenders and mooring	1		Inst. Manoeuvre	1		
7C	Mooring	2			1		
8C	Man overboard - Survival	1				Pre-C1	
9C	Functional chain for ship steering	2					
10C	Bridge organisation - R01 - DISAC - DGNAUT – Main principles to be checked over during the watch	2		LV			Group of 3 UI
11C	Launching of crafts	1		Manoeuvre			
12D	Test on theoretical manoeuvre	1		or assistant			
13C	Navigation in restricted water	2				Lecture	
14C	Screws, rudder, gyration, port rigging	2	Class		2	hall	
15C	Traffic separation scheme	1					
16C	Underway replenishment	2					
17C	IAMSAR (International aeronautical and maritime search and rescue manual)			Inst Navis			
18D	General test	1		LV Manoeuvre or assistant			
	TOTAL	31*					•

<sup>\*</sup> including 1 UI in pre-corvette

	PRACTIC	MANŒ	UVRE				
Code: MANPRAT	Title	UI	Group	Teacher	Stage	Room	Obs
1P	Stretch of water – inflatable dinghy	3	½ Squad		1	PDE	+ «sea sense» certificate, this gives access to the dinghy skipper qualification
2P	Stretch of water – mooring with a training ship for manoeuvre		½ Squad	Instructor	1	PDE	After MANTHEO7
3P	Stretch of water - longboat/VS9	4	1/2 Squad		Corvette sèche	PDE	
4P	Stretch of water – longboat/VS9	3	1/2 Squad		Pre-C2	PDE	
5P	Stretch of water –VSP	3	1/2 Squad		Pre-C2	PDE	
6P	Sailing: course – Basic seamanship	1	Esc	Instructor	Corvette sèche	Ailée	
6P1	Sailing: course – Terms for using sailing ships – Mooring – Rig	1	Esc	Sailing division chief	Corvette sèche	Marina	
6P2	Sailing: course – Basic theory (1)	1	Esc	Instructor	Corvette sèche	Lecture hall	
7P	Stretch of water – <b>Training ship for</b> manoeuvring/VSP/Sailing	3	1/2 Squad	Instructor	Pre-C2	PDE	
8P	Mechanic on the canot major	3	½ Squad	Instructor		PDE	
	TOTAL	25*					

<sup>\*</sup> including 13 UI in pre-corvette

## PRÉ-CORVETTES AND CORVETTE

	Training title		UV Seaman training for cadets from the Academy (Semester 1)			
	Short title			FMM S1		
Version			Edition date 1 <sup>st</sup> June 2003			
FCF	Peda.		I	Pedagogical objectives		
Landmark	Landmark obj. N (to be able, at the end of the training, to)					
	E – CORVETTE AND SIMULATOR					

#### 1. PRECORVETTES

Before embarking, cadets perform two weeks of pre-corvette, including one that take places one week before the corvette.

During these corvettes that are exclusively dedicated to seaman training, cadets are shared out into groups of 3 or 4; the three visual simulator bridges are armed by three groups of 3 or 4; simultaneously, three blind bridges are armed by three other groups. The rest of the cadets alternate courses, lake, sport and studies. Some slots at the visual simulator are planned in non-working hours.

Training objectives for the visual simulator are:

- watch preparation;
- regulation steering and engine commands;
- acquisition of techniques for searching and identifying sea marks;
- to set up a position by means of three bearings, acquisition of fairway navigation techniques (lining and constant bearing by the bow and by astern, with and then without drift);
- introduction to optical lookout and practice of simple anti-collision manoeuvres;
- use of VHF;
- introduction to anchoring, steering damage;
- deck logs keeping.

The training objective for radar simulator consists in an introduction to radar navigation methods (danning, position by radar distance), CPA<sup>10</sup> calculation and announcement.

#### 2. CORVETTE

Cadets carry out a 2-week corvette. They perform at least 16 hours of watch in F1 (function one: officer of the watch in pairs) and also 8 hours in F1 on the simulator.

General objectives for this first corvette are:

- navigation / manoeuvre: introduction to coastal navigation;
- ship: discovery of main installations of a school-ship (propulsion apparatus, production of electricity, of cold, steering apparatus and transmission of power) and visits.

A special circumstances order provides the level of the cadets and details the objectives they have to reach for the next corvette.

-

<sup>10</sup> closest point of approach

# **METEOROLOGY**

Training title			UV Seaman training for cadets from the Academy (Semester 1)					
	Short title	2		FMM S1				
Version 01 Edition date			Edition date	1 <sup>st</sup> June 2003				
FCF	Peda.		Pedagogical objectives					
Landmark	obj. N		(to be ab	le, at the end of the training,	to)			
		F. MO	<b>DULE ON STO</b>	CW METEOROLOGY				
F	1.1	•	Aptitude for using and interpreting information provided by meteorological quipment on board					
F	1.2	•	Knowledge of various meteorological phenomena characteristics, report procedures nd recording systems					
F	1.3	Aptitude for i	aptitude for interpreting available meteorological information.					

Code: MTO	Title	UI	Group	Teacher	Stage	Room	Obs
1C	Meteorology functioning Possibilities, current limits and prospects	1			1		
2C	Atmosphere composition. Meteorological factors and connections between them	2			1		
3C	Clouds formation – General circulation – Time system	2	Class		1		
4C	Cyclogenesis and frontogenesis of temperate regions. Dangerous phenomena of synoptic scale and small scale	2	Class	Meteo. Engineer	1	Lecture	
5C	Sea situation (wind sea, swell, notion of mobile fetch, freak waves)	2			1 ou 2	hall	
6C	Adaptation of meteorological prospects at sea	2			1 ou 2		
7C	Local phenomena (breeze, galerne <sup>11</sup> , coast effect, fog)	2	Squad		1 ou 2		
8P	Analysis of meteorological documents	2	•	METOC12	Pre-C2		
9P	Analysis of meteorological documents	2		METOC	Pre-C2		
10D	Test	1	Class	Meteo. Engineer	2		
	TOTAL	18*		<del></del>			

11 galerne = weather phenomenon similar to alongshore surges and coastal trapped disturbances
12 METOC = meteorologist-oceanographer

# **SHIP AND ENERGY TRAINING**

Training title  UV Seaman training for cadets from the Acader (Semester 1)					m the Academy	
	Short title		FMM S1			
Version			Diagram 2005 Edition date June 2005			
FCF	Peda.		Pedagogical objectives			
Landmark	obj. N		(to be able, at the end of the training, to)			

# G. SHIP AND ENERGY TRAINING

G	1	To grasp complex mechanical systems through various thermal machines that are
		used in the navy and know the different aspects linked with electrical energy

Code: FNE	Title	UI	Group	Teacher	Stage	Obs	
1C	Introduction to single-phase current	1		Electro-techniques	1		
2P	Introduction to single-phase current	1 Squad		Electro-techniques MP Elec	1	or 1/2 squad	
3C	Introduction to three-phase current			Electro-techniques	1		
4P	Introduction to three-phase current	2		Electro-techniques MP Elec	1		
5C	Dangers of electricity	1	Class	MP Elec	1	or squad	
6C	Plans reading	1		Electro-techniques	1		
7P	Plans reading	2		MP Elec	1		
8C	Gas turbine Theory	2		Thermodynamics		or 1/2	
9P	Gas turbine Reckoning	2	Squad	Thermodynamics			
11C	Refrigerated machines Theory	2	Bquau	Thermodynamics		squad	
12P	Refrigerated machines Reckoning	2		Thermodynamics			
13C	Refrigerated machines Description	2		LV Ship			
14D	Test n°1	1	Class	Thermodynamics Electro-techniques LV Ship / MP Elec			
15C	Diesel Description	2		MP Mechanics			
16C	Diesel Description	2		MP Mechanics			
17C	Diesel Description	2	Squad	MP Mechanics		or 1/2	
18C	Diesel Theory	2		Thermodynamics		squad	
	Diesel Reckoning	2		Thermodynamics		Squad	
20C	Steam Theory	2		Thermodynamics			
21C	Steam Reckoning	2		Thermodynamics			
23D	Test n°2	1	Class	LV Ship / MP Mechanics Thermodynamics			
	TOTAL	28					

# FRENCH NAVY ADDITIONAL INFORMATION – OPERATIONS AND COMMUNICATIONS

	Training title		UV Seaman training for cadets from the Academy				
			(Semester 1)				
Short title		FMM S1					
Ve	ersion		01 Edition date 1 <sup>st</sup> June 2003				
FCF	Peda.		Pedagogical objectives				
Landmark	obj. N		(to be able, at the end of the training, to)				
		I. MO	<b>DULE ON NAV</b>	AL ADDITIONAL SKILLS	3		
I	2	ATP1 (volume	ATP1 (volume II) learning				
I	3	Operational culture					
I	4	Approach of h	Approach of basic communications				

Code:	Title	UI	Group	Stage	Room	Constraints
ATP1P	ATP1 volume II - Presentation – Use	2	Sanad	2		
ATP2P	ATP1: Radiotelephony procedure		Squad	2		
ATP3P	ATP1: Practical radiotelephony – Authentication codes			2	DNIAN	
ATP4P	ATP1: Manoeuvre rules – Main kinds of training – Evolution		½ Squad	Pre C2	P NAV	
ATP5P	ATP1: Plastic manoeuvring plot - Theory - Application to tactiscope	5		Pre C2		
ATP6D	Test: ATP1 vol II/Communications	ations 1 Class 3		Lecture hall	After TRANS4	
OPS1	Identification of French ships	French ships 1		<b>a</b>		By LVE
OPS2	Identification of French ships			Conscripti		By LVE
OPS3	Identification of French aircrafts	1		<b>511</b>		By LVE
OPS4	Fight under water (concept, equipments, weapons)	1		1		
OPS5	Fight above surface: LAA et LAN (concept, equipments, weapons)	1	Squad	1	Squad	
TRANS1	General remarks on communications	1		2	ď	
TRANS2	Fixed networks/Infrastructures			2		
TRANS3	Inner connections of a naval force - Notions of communication manoeuvre	1	2			
TRANS4	Drafting of a message	1	½ Squad	2		
	TOTAL	24*				

<sup>\*</sup> including 7 in pre-corvette.

# TITLE III - MILITARY AND HUMAN TRAINING

This training is composed of the following modules:

- ethics;
- French maritime history;
- organisation and regulation of the Navy (*ORM*);
- official correspondence;
- interviews with the Lieutenant responsible for the squad
- protection/defence (PRODEF);
- physical and sport training;
- English level testing.

Integration is an important step in the schooling. The general objective of the training during the first semester is to make cadets have an exemplary military behaviour, to enable them to know main organisation trends of the French navy and begin thinking about their future responsibilities as naval officers.

#### **ETHICS**

# 1. OBJECTIVES

To deepen one's thought on officer's values and the sense of his commitment at the disposal of the nation.

# 2. INITIAL PROGRAMME

This module is divided into 6 sessions of 2 hours, during which the class attends a conference and then discusses ethics issues by groups. It is supervised by the lieutenant responsible for the squad (8 UI).

ETHIQUE Code	Discussion		Observations
1C	Responsibilities and liberties	2	
2C	Power and authority		
3C	Loyalty, obedience and disobedience		M. Assaf
4C	Man and honour	2	141. 7 13541
5C	Death, suffering and dignity	2	
6C	Decision-making and command	2	
7C	Extension of the discussion. Application to the life on board	8	LVE
TOTAL		20	

At the end of this teaching cycle, each cadet takes part in a general contest on a subject related to ethics. The best written papers will be awarded during the second semester.

#### ORGANISATION AND REGULATION OF THE NAVY

#### 1. OBJECTIVES

To bring basic knowledge, necessary for life within the school and for discovering the military and maritime world.

# 2. INITIAL PROGRAMME

ORM	Course	Teacher	Duration	Group	Observations
Code					
1C	Behaviour rules and established custom		1 UI		<b>D</b> 6 11 6
2C	General discipline regulations		1 UI		Performed before integration period
3C	Officer schools house rules		1 UI		
4C	Ship, important functions to be fulfilled (to float, propel, lead, perceive the environment and act)	LVE	1UI	Squad	Before embarking in the forces.
5C	Organisation of Defence and Navy		3 UI		With the help of the <i>DIM</i>
7D	Test		1 UI		
TOTAL			8		

The discovery of the navy and of the decree 140 appears during a training period within the forces. Each cadet spends two weeks in a unit of the navy and shares the daily life of seamen that are part of it. The aim is to take part in all possible ground activities, regarding the reduced professional experience of the cadets. Equipped with an extremely structured training passport, the cadet discovers the navy's missions, means of action and organisation thanks to an immersion into a unit and within its staff.

# POLITICAL AND SOCIAL SCIENCES: THE FRENCH MARITIME HISTORY

# 1. OBJECTIVES

- To make new cadets of the École Navale discover the history of the French navy;
- To make them understand how the French navy of today (their future working place) was built up, by favouring the period after 1945;
- To give rise to a taste for history and then keep it up thanks to the meeting with French specialists in the field of naval history.

# 2. INITIAL PROGRAMME

Code HIST	Themes	UI	Teachers
1C	From the <i>Royale</i> to the French Navy	2*3	History teacher
2C	The Navy during the French Second Empire	3	
3C	The Navy of the Third Republic (1871-1918)	3	Cara alana farana
4C	The Navy of the interwar period (1919-1939)		Speakers from the historical
5C	The Navy during WW2		service of the
6C	The Navy of the Fourth Republic	3	defence
7C	The Navy of the Fifth Republic (1958-1974)	3	defence
8C	The Navy of the Fifth Republic (1974-1991)	3	
9D	Written test	2	History teacher
10C	Test marking	1	History teacher
	TOTAL	30	

#### **MILITARY TRAINING**

# 1. OBJECTIVES

- Obtaining of *Certificats d'Aptitude aux Tirs d'Infanterie (CATI)*<sup>13</sup> which correspond to weapons that are available aboard naval units: FAMAS<sup>14</sup>, PSA<sup>15</sup>.
- Introduction to basic principles for protection/defence (PRODEF)
- Parade training, preparation of the flag presentation ceremony
- First exercise for physical hardening (Chrysalide) to go from civilian world to military world
- To take the TAP tests in the prospect of the parachute training course (semester 2)

#### 2. INITIAL PROGRAMME

CODE PRODEF	Course	Concerned teachers	UI	Observations	Group
/	March	LVE	4 HNO	During integration period.  Physical preparation for Chrysalide exercise. Supervised by 2 <sup>nd</sup> -year cadets ( <i>aspirants</i> ).	Class
/	Chrysalide exercise	Off Prodef Inst FUS	14 HO 42 HNO	During integration period. Specified by a special order. Including 4*7UI dedicated to activities at night.	Class
1C	PRODEF principles - Self-defence and use of weapons	Off Prodef	2		Class
2C	FAMAS theory	Inst FUS	2		
3P	FAMAS shooting	Inst FUS	8	To be followed.	Squad
4C	PSA theory	Inst FUS	1	1 weapon/week	Squad
5P	PSA shooting	Inst FUS	6		
11D	Test	Off Prodef	1		
12P	Close order	Off Prodef Inst FUS	5*1,5 h HNO	Before the flag presentation ceremony	Class
13P	Close order	Off Prodef Inst FUS	3	On Thursday or Friday before the flag presentation ceremony	Class
14P	Static TAP tests	Off Prodef Inst US	2 HNO	Volunteers	½ a class
15P	Dynamic TAP tests	Off Prodef Inst FUS	2	volunteers	½ a class
16P	March theme 1	Off Prodef Inst FUS	5 HNO	From 5pm to 10pm max.	Class
	TOTAL		39 HO 60,5 HNO		

<sup>&</sup>lt;sup>13</sup> Aptitude certificate for infantry shooting

<sup>&</sup>lt;sup>14</sup> Assault rifle (5.56 mm)

<sup>&</sup>lt;sup>15</sup> Semiautomatic

#### PHYSICAL EDUCATION

This semester is characterized by a **normal physical and sport training** by squad (23UI), orientated towards physical and sport activities that have no military links. It is also composed of a physical education by sport option (24UI).

#### 1. OBJECTIVES

- To develop physical capacities and especially endurance.
- To develop motor skills that are specific to the sport and physical activities that are chosen.
- To get a significant level in a sport activity by means of the sport option training.
- To prepare the *T.S.G.E.D.*
- To prepare competitions that are organised by the French federation for academic sport and also take part in them.

#### 2. INITIAL PROGRAMME

## 2.1. Teaching by group

23 teaching units are dedicated to this teaching. It is structured the following way:

- improvement of the aerobic capacity (endurance) thanks to running (2 UI/week);
- swimming (1UI/week);
- pass'sport tests (5UI).

# 2.2. **Teaching by sport option**

- Sport options are defined at the beginning of the academic year, for example:
  - Team physical and sport activities: football, rugby, handball, volley-ball, basketball, sailing;
  - Individual physical and sport activities: athletics (minimum physical shape, sprint race, cross-country running road race), orienteering, horse riding, fencing, swimming, badminton, fight sports (boxing and self-defence).
- Provisional timetable: Training by sport option is carried out during working hours on Thursday (H5-H7 for a total amount of 24 UI) and on Tuesday evening during non-working hours (H8-H9 for a total amount of 24 UI).

#### 2.3. Morning muscular awakening

A weekly session of muscular awakening (1h/week for a total amount of 22 UI during non-working hours) is carried out by squad. These sessions are organised the morning before the beginning of the courses and are supervised by cadet officers.

## 2.4. Admiral cross-country running

Two admiral cross-country running on the site of the academy are organised during this semester (4UI in total).

# INTERVIEWS WITH THE LVE

# 1. OBJECTIVES

To think about the officer function and especially command. To go thoroughly into the knowledge of the navy.

# 2. INITIAL PROGRAMME

Landmark	Number of UI	Subject
LVE	3	Features of the military profession
TOTAL	3	

#### OFFICIAL CORRESPONDENCE

#### 1. OBJECTIVES

Make cadets get basic knowledge and methods that are necessary for the drafting of an official correspondence.

#### 2. INITIAL PROGRAMME

Bases of official correspondence are taught during courses by squad. They must enable the cadets to understand the importance and specific features of the written work. This learning is completed, under the direction of the lieutenants responsible for their respective squads, by writing exercises all along the schooling at school and thanks to computer-based models that are at the disposal of the cadets (orders of circumstances, reports, ...).

COROFF landmark	UI Nb	Туре	Instructor	Classroom	Subject
1C	1	Course	LVE	Squad	Presentation - Importance of the written work.
2C	2	Course	LVL	Squad	The different types of written documents.
TOTAL	3				

#### MODERN LANGUAGE LEARNING: ENGLISH

The training objective of the École navale is the obtaining of the Language Military Certificate (CML), i.e. the 2<sup>nd</sup> level in English, for each cadet at the end of the schooling. The awarding of the engineering diploma is linked with the obtaining of this skill.

#### 1. ENGLISH AT THE FIRST SEMESTER

The first semester of cadets that arrive at the academy is dedicated to military training. English courses only start at the beginning of the second semester.

However, some of the preparatory workings are required to be carried out during this period:

- Allocation of an equivalence for cadets who already have a diploma proving their level of English: the language committee in the navy has put in place a table providing equivalences between some civilian exams (TOEFL, TOEIC, Cambridge for example) and various levels of CML. Cadets who own these kinds of diplomas must thus ask the lieutenant responsible for their squad, as soon as they arrive at the academy, about possible equivalences they can claim. The obtaining of these equivalences sometimes takes time;
- A presentation of the organization of English teaching at the academy and the terms so as to take the CML1 is made to the whole class;
- The first session of the CML1 takes place after the Autumn holidays without any specific preparation. This examination is a way to assess the initial skills of each cadet, to form then level groups and orientate towards the preparation of the CML2 those who pass the CML1;
- Cadets who are proved to have a weak level of English benefit from tutoring system with one of the teachers from the Language department. The origin of these weaknesses is found through an interview and a plan is then designed so as to enable them to fill the gaps;
- The language laboratory is open beyond working hours. It enables motivated cadets to practise English during the first semester. Cadets who consider having a weak or insufficient level are strongly encouraged to go to this laboratory as often as they can and use the « Tell me more » software.

#### 2. WHAT DOES CML1 CONSIST IN?

The CML1 concerns four skills: oral comprehension, written comprehension, written and oral expression. Cadets have to get at least 10 out of 20 in each of these skills. The use of any reference document (monolingual or bilingual dictionary) is strictly forbidden.

Detailed information concerning the programme and the terms of the CML are to be found under the section: *DPMM / Bureau des langues de l'Intramar* (Language Department).

The obtaining of the first level is the first stage to be overcome in the prospect of the CML second level.

# 3. WHAT DOES CML2 CONSIST IN?

It is important to underline the fact that the level of linguistic skills and thought which is required to get the CML2 is by far higher than the one required for the CML1. The preparation for this exam requires thus a strong involvement of the cadets and a personal work so as to ensure that all important elements are actually mastered. At this stage, it is also essential to become familiar with Anglo-Saxon medias.

#### 4. TEACHERS

The English department team is composed of eleven teachers that either hold the *CAPES* (Secondary school teaching certificate) or have passed the *agrégation* (High-level competitive examination for teachers). Their office is located on the first floor of the Orion building.

# 5. INITIAL PROGRAMME.

CODE ENG	Themes	UI	Observations
1	Presentation conference:  - Language Department  - Objectives of the linguistic training at the École navale  - CML1 tests	1 HO	Language Department
2	Presentation of the language laboratory and the software « Tell me more »	1 HNO	For each squad. Priority will be given to cadets considered as being weak. Language Department
3	CML1 Test	5 HO	Language Department
	TOTAL	6 HO 1 HNO	